

**PROGRAM OPPORTUNITY NOTICE (PON)**

**COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF ENERGY RESOURCES**

**HEAVY DUTY HYBRID VEHICLE DEMONSTRATION PROGRAM**

Date Issued: January 9, 2009

Application Deadline: 4 PM, February 27, 2009

**Commonwealth of Massachusetts Department of Energy Resources  
Heavy Duty Hybrid Vehicle Demonstration Program**

**Background**

The Massachusetts Department of Energy Resources (DOER) and the Massachusetts Clean Cities Coalition has long been at the forefront of efforts to diversify the types of motor fuels used in the Commonwealth and to reduce greenhouse gas emissions from the transportation sector. DOER led the largest electric vehicle demonstration in the country, has received numerous grants from the US Department of Energy to demonstrate CNG vehicles, is exploring the opportunities for growing cellulose feed stocks in the northeast, and was instrumental in the siting of a large E-85 station at Boston's Logan International Airport. In keeping with our efforts to lessen the dependence on petroleum-based products as a motor fuel and reduce greenhouse gas emissions, DOER is introducing this opportunity for private sector businesses and Massachusetts public entities to participate in the next phase of "green transportation" – heavy duty hybrid vehicles.

Heavy duty hybrid vehicles are currently available, but at a premium price. Unlike today's clean diesel vehicles which depend on the diesel engine for 100% of propulsion, hybrids work similar to today's commercially available hybrid cars. For the purposes of this funding opportunity, a heavy duty hybrid vehicle (HDHV) has an internal combustion engine and an electric motor supplying power to propel the vehicle (either together or independently) and an onboard electrical storage device that will receive electric power generated by the internal combustion engine that will supply power to the electric motor to propel the vehicle.

Demonstrating these next generation vehicles in the northeast will assist in determining their cost effectiveness to private commercial fleet operators. Questions about range, maintenance, cold weather operation, and diesel cost savings will be addressed in this program. Information gathered will be of value to policy makers when evaluating the environmental impact these vehicles may have on the Commonwealth. Additionally, such information will be of value to truck and battery manufacturers.

**Program Outline**

DOER will fund the cost differential between same model trucks with a straight diesel engine to that of diesel/electric hybrid trucks as defined above. The vehicle may be used for private or public (state or municipal) sectors for commercial operations. Trucks must be Original Equipment Manufacture (OEM), be covered by a manufacturer's warranty and fully serviced (including the hybrid system) by the OEM's authorized dealers. Vehicles must be registered and garaged in Massachusetts and have a minimum 25,000 pound GVWR. A total of \$400,000 is available. Selected applicants will be responsible

for procuring the vehicles within a time limit set by DOER, registering the vehicles in the Commonwealth of Massachusetts, providing insurance, inspections, and supply performance data as described in the application document. A maximum of five vehicles may be assigned to one applicant unless there is a lack of qualified applicants. DOER reserves the right to further limit per applicant vehicles to ensure geographic diversity. Program length is three years from vehicle delivery date. DOER reserves the right to withdraw this offer at any time.

All vehicle procurement transactions shall be between the vehicle supplier and program participant. The maximum per vehicle DOER subsidy shall be \$40,000 unless the program is undersubscribed.

### **Vehicle Operation**

The vehicle must accrue a minimum of 15,000 miles annually except for public sector applications, for which this requirement does not apply. It is the intent of the program to maximize the use of the vehicle's hybrid battery system to minimize the use of petroleum. When selecting routes where these trucks will be operated, routes should be assigned where battery operation mode can be maximized (stop and go driving mode or high idling mode). The Grantee should develop a driver training program in conjunction with the vehicle manufacturer to fully train the driver to maximize the efficient operation of these vehicles.

### **Funding**

DOER will provide funding to cover the incremental cost of the hybrid system, not to exceed \$40,000 per vehicle. Applicants may request more than one vehicle under this grant, however second awards will be made after all eligible applicants have received funding for the first vehicle.

### **Vehicle Acquisition and Disposal**

The Grantee will acquire the hybrid truck through its normal fleet vehicle acquisition process. These vehicles may be purchased or leased as per the Grantee's standard practice. At the conclusion of the program the Grantee may dispose of the vehicle using normally accepted practices. The Commonwealth will hold no financial or ownership interest in the vehicles. In addition, it is the responsibility of the Grantee to ensure that warranties are in place to cover the vehicle and the battery system for the duration of this program.

### **Vehicle Management**

The Grantee will manage these vehicles in a formal fleet program, and ensure the vehicles are fully utilized, maintained, assigned to qualified drivers, registered in the Commonwealth, and provided with full insurance coverage. The Commonwealth will not provide any support for the maintenance or repair of the vehicles in this program.

## **Vehicle Repairs and Maintenance**

Vehicle repairs and maintenance are the responsibility of the Grantee. The Grantee will ensure that an adequate number of repair facilities qualified to maintain the overall vehicle and the hybrid battery system within the vehicles operating range are in place to minimize any vehicle down-time. The Grantee will report any chronic maintenance issues to DOER.

## **Program Administration**

The Grantee will ensure that the vehicles are utilized, maintained, and stored in a secure location at all times. In addition the Grantee will comply with all DOT regulations.

## **Program Reporting**

The Grantee will provide quarterly reports to DOER for the program period. Reports will be in an electronic format developed by DOER.

## **How to Apply**

Application packages are available through the Massachusetts Department of Energy Resources. The package includes ranking criteria. The Application deadline is February 27, 2009. DOER reserves the right to limit the number of awardees and vehicle model in each geographical part of the state. Any questions related to this PON must be submitted in writing via Email to [david.rand@state.ma.us](mailto:david.rand@state.ma.us). Answers and the Application package are posted on DOER's website at [www.mass.gov/doer](http://www.mass.gov/doer). Completed applications must be submitted in writing. To obtain additional information contact:

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